

CONSERVATION *Showcase*



Ide Transition Open Feedlot to Hoop Buildings

Jason Johnson, Public Affairs Specialist, August 2011

When Chad Ide added dairy cows to diversify his family's feeder cattle business, it set off a chain of events that led to the construction of two new 12,600 square foot hoop buildings on their Union County farm. The initial cost of installing the buildings is already being offset by healthier livestock, better manure utilization and the elimination of manure runoff.

Chad's father, Monty, says an open feedlot sat on the family farm his entire life and expanded throughout the years. But when Chad began feeding Holstein dairy cows, it changed the complexity of the situation. "Holsteins don't do very well outside in the winter," said Monty, "and we began having issues with manure runoff from the feedlot."

The Ides were somewhat familiar with covered feedlots. They built two smaller cattle barns a few years ago to feed young calves, and their neighbors own larger total containment buildings. "When we decided to transition from the open feedlot to covered buildings we looked at several options," said Monty. "We attended some field days throughout southern Iowa



When Chad Ide (left) got into the dairy cow feeding business, his father, Monty, helped transition the open feedlot to two new hoop buildings.

and Chad took tours in Story and Ringgold Counties, as well. We did our research."

The Ides decided on two hoop buildings, and livestock moved into their new covered homes in October and November of 2010. They were constructed on top of and adjacent to their open feedlots.

Covered Feedlot Benefits

Covered feedlots, such as hoop buildings and monoslope barns, are designed to provide a suitable environment for growth, and aid in animal handling, manure management, feeding and ventilation. They eliminate the need for sediment basins, or holding ponds, reducing odor and potential groundwater contamination.

Hoop buildings are typically longer and narrower than other roofed feeding options, like monoslope buildings. The Ides' hoop buildings are 42' x 300'. They include a rounded canvas top with retractable sides to allow airflow. "The hoop buildings stay warmer in the winter and cooler in the summer," said Monty. "Earlier



The Ides chose two long and narrow, 42' x 300', hoop buildings to be constructed on a portion of their old feedlot.

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One bale of cornstalks per head of cattle per year is what is needed to provide the appropriate amount of bedding for the livestock on the concrete floor. Chad Ide says they scrape the manure-bedding weekly.

this summer we had a few 90 degree days and it felt cool in there. There was never a calf panting and they never backed off feed.”

Livestock Health & Performance

These comfortable conditions are, so far, leading to healthy, happy cows. Monty says dairy cows are susceptible to pneumonia, but they haven’t treated any of them for that type of illness. After one full winter in cover, he says mortality rates are way down. “We have only lost one since we moved them into the hoop buildings,” he said.

It might be a little early to gage their overall weight gain performance, since it was less than a year when they moved into the hoop buildings, but Monty reports that they are doing well.

Manure Management

Something that hasn’t been difficult to assess is improved manure availability in covered buildings, compared to open feedlots. The Ides grow corn and soybeans on an adjacent 500-acre field. They no longer need to use other sources of manure to fertilize that field. Covered feedlots almost always include a concrete floor that can easily be scraped weekly. “It’s a lot better quality manure than what we were getting out of the lots,” said Chad. “It’s pure manure – there’s no rainwater or dirt mixed in.”

“I thought we were scraping our [open] lots and doing pretty well,” said Monty, “but we weren’t getting a fraction of the manure we could have. Now we are finding out how much manure cattle actually put out.”

After scraping, the manure is stored on a concrete manure storage area at one end of each of the Ides’ hoop buildings.

Bedding

The Ides bale their cornstalks to use for bedding in the hoop building. They will use about one bale per head per year. They have about 300-head in each building. “We used more than one bale per head in the later winter and early spring and less than that throughout the winter,” said Monty.

Financial Assistance for Covered Buildings

USDA’s Natural Resources Conservation Service (NRCS) provided financial and technical assistance to the Ides for the cost and design of their new hoop structures. NRCS can offer financial assistance on a per animal unit basis through the Environmental Quality Incentives Program (EQIP). For solid manure confined systems that replace existing open feedlots, NRCS offers payment rates of more than \$200 per animal unit through EQIP.

EQIP is a voluntary conservation program that promotes agricultural production and environmental quality. Practices such as grassed waterways, terraces, prescribed grazing, and even tree plantings may be eligible for financial assistance through EQIP.

To help the Ides apply the appropriate amount of manure nutrients to cropland, NRCS required them to apply a Comprehensive Nutrient Management Plan (CNMP) for their entire operation. A CNMP addresses the management and treatment necessary for the operator to protect soil and water resources. The cost of the CNMP can also be offset by funding through EQIP.

The Ides are receiving additional funds through the Conservation Stewardship Program (CSP), which rewards ag and forestry producers for their past conservation work, but also requires them to improve and maintain existing systems and to undertake additional conservation activities. Through CSP, NRCS makes an annual payment over five years.

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USDA NRCS
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For more information about transitioning from an open feedlot to a covered livestock building, or to learn more about NRCS' free technical assistance, visit your local NRCS field office or go online, www.ia.nrcs.usda.gov.



The Ides like how air flows freely throughout the hoop buildings in the summertime.